## 1 <u>CLAIMS</u>:

- 1 1. A load cell apparatus comprising:
- 2 (a) a frame;
- 3 (b) an upper compliance assembly connected to said frame;
- 4 (c) a load cell connected to said upper compliance assembly; and
- 5 (d) a lower compliance assembly connected to said load cell.
  - 2. The apparatus of Claim 1 wherein said upper and lower compliance assemblies further comprise:
    - (a) a first base;
    - (b) a compression pad connected to said first or second base;
    - (c) a rebound pad;
    - (d) a load plate between said rebound pad and said compression pad; and
    - (e) a second base connected to said rebound pad or said compression pad.
- 1 3. The apparatus of Claim 1 wherein said load cell further comprises:
- 2 (a) a load cell yoke connected to said upper assembly; and
- 3 (b) an upper and lower loading saddle connected to said load cell.
- 1 4. The apparatus of Claim 1 further comprising an overload limit.

- 1 5. The apparatus of Claim 4 wherein said overload limit further comprises:
- 2 (a) a fixed overload limit; and
- 3 (b) a moving overload limit.

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- 1 6. The apparatus of Claim 1 wherein said upper compliance assembly and said load cell are
- 2 connected to each other and to said frame by a hanger stud.
- The apparatus of Claim 1 wherein said lower compliance assembly further comprises:
  - (a) a rod end link connected to said load cell; and
  - (b) a drawbar connected to said rod end link.
  - 8. The apparatus of Claim 1 further comprising a rotation preventor.
  - 9. The apparatus of Claim 7 further comprising a rotation preventor connected to said drawbar.
- 1 10. The apparatus of Claim 1 further comprising a data transfer means for providing data to
  2 the load cell and for receiving data from the load cell.
- 1 In a weighing system, a load cell method comprising the steps of:
- 2 (a) connecting a frame to the weighing system;
- 3 (b) connecting an upper compliance assembly to said frame;

4 (c) connecting a load cell to said upper compliance assembly; and 5 (d) connecting a lower compliance assembly to said load cell.  $\sigma$ 12. The method of Claim 11 further comprising the step of providing said upper and lower 1 2 compliance assemblies with: 3 (a) a first base; 4 (b) a compression pad; 5 (c) a rebound pad; a load plate located between said rebound pad and said compression pad; and (d) (e) a second base. 13. The method of Claim 11 further comprising the steps of: connecting a load cell yoke to the upper assembly; and (a) connecting an upper and lower loading saddle to said load cell. (b) 1 14. The method of Claim 11 further comprising the step of connecting an overload limit. 1 The method of Claim 14 wherein connecting said overload limit further comprises the steps 15.

providing a fixed overload limit; and

providing a moving overload limit.

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of:

(a)

(b)

1	16.	The method of Claim 11 further comprising the step of connecting said upper compliance
2		assembly to said frame by a hanger stud.

- 1 17. The method of Claim 11 further comprising the steps of:
- 2 (a) connecting a rod end link to said load cell; and
- 3 (b) connecting a drawbar to said rod end link.
- 1 18. The method of Claim 11 further comprising the step of adding a rotation preventor.
  - 19. The method of Claim 17 further comprising the step of connecting a rotation preventor to said drawbar.
  - 20. The method of Claim 11 further comprising the step of connecting a data transmission means to said load cell for transmitting and receiving data to and from said load cell.